

Title (en)

FLUID MACHINERY, HEAT EXCHANGING APPARATUS, AND OPERATING METHOD FOR FLUID MACHINERY

Title (de)

STRÖMUNGSMASCHINE, WÄRMEAUSTAUSCHVORRICHTUNG UND BETRIEBSVERFAHREN FÜR STRÖMUNGSMASCHINE

Title (fr)

MACHINE À FLUIDE, APPAREIL D'ÉCHANGE DE CHALEUR, ET PROCÉDÉ DE FONCTIONNEMENT POUR MACHINE À FLUIDE

Publication

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Application

EP 16834488 A 20160601

Priority

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Abstract (en)

A fluid machinery, a heat exchange equipment, and an operating method for fluid machinery. The fluid machinery includes: an upper flange (50); a lower flange (60); a cylinder (20), the cylinder (20) being sandwiched between the upper flange (50) and the lower flange (60); a rotating shaft (10), the axis of the rotating shaft (10) being eccentric to the axis of the cylinder (20) and at a fixed eccentric distance, and the rotating shaft (10) sequentially penetrating through the upper flange (50) and the cylinder (20); and a piston component (30), the piston component (30) being provided with a variable volume cavity (31), the piston component (30) being pivotally provided in the cylinder (20), and the rotating shaft (10) being drivingly connected with the piston component (30) to change the volume of the variable volume cavity (31). Because the eccentric distance between the rotating shaft (10) and the cylinder (20) is fixed, the rotating shaft (10) and the cylinder (20) rotate around the respective axes thereof during motion, and the position of the center of mass remains unchanged, so that the piston component is allowed to rotate stably and continuously when moving in the cylinder (20); and vibration of the fluid machinery is effectively mitigated, a regular pattern for changes in the volume of the variable volume cavity is ensured, and clearance volume is reduced, thereby increasing the operational stability of the fluid machinery, and increasing the working reliability of heat exchange equipment.

IPC 8 full level

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CPC (source: EP KR US)

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